10/662.146

REMARKS

Chaims 1-9 are pending and stand rejected.						ļ	
Claims	have been amended.	It is believed	that no	new matter	has b	een addec	łЪу
these amendments.							

35 U.S.C. §103

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Robert et al..

US Patent Number 6,528,587 owned by Applicant company with two common inventors. Applicant has noted the Response to Arguments provided by the Examiner who contends that Applicant's discovery of a selection of a specific composition and molecular weight of SBS in a multi-layer extrusion tie comprising a PS layer would be obvious. Applicant disagrees, and believes the present claims are patentably different from the disclosure of '587. Should the Examiner disagree with Applicant's Remarks below, Applicant would be willing to execute a terminal disclaimer of the '587 patent.

Applicant maintains the arguments for patentability previously presented, and will reply here to the Examiner's additional remarks.

The '587 reference fails to teach or suggest every one of Applicant's claim limitations, and therefore fails to present a *prima facie* case of obviousness. Specifically, the '587 reference fails to teach or suggest:

- 1) a coextrusion tie that is a three component blend;
- 2) a coextrusion tie composition having 40 to 60 weight percent of a styrene/butadiene/styrene (SBS) block copolymer;
- 3) a coextrusion tie composition in which 50-90 mol% of the SBS block is styrene.

As stated in the Background of the Invention in [0002] the '587 reference is designed for a different purpose, and there it is not surprising that the '587 "document does not relate to multi-layer structures comprising a (polystyrene) PS layer. To date, coextrusion ties for structures

10/662.146
comprising at least one PS layer are ethylenc/vinyl acetate copolymers grafted with maleic anhydride."

- 1. Three component blend. The '587 reference describes a coextrusion tie made of 5-35% (A) with 35-95% (B), with (B) being a single polymer selected from the group of four listed polymers. There is no teaching that (B) would ever be a blend of more than one of the group, nor any language such as "one or more" or "a mixture thereof" which are typically used to include a blend. Indeed, in column 4. line 35, the '587 reference states that "(B) may also be a polymer having an elastomeric character". It does not say that (B) may additionally include an elastomer. To further solidify the concept that no mixtures are taught or suggested by the '587 reference, one can look to the Examples in which all Examples use only PE copolymers, never mixtures. Not only do these Examples offer proof of a teaching of a single (B) component, they also teach away from ever using or needing a blend of two or more components. One in the art would not be motivated by a teaching of a single (B) component to practice a (B) blend, much less require a blend.
- 2. a coextrusion tie composition having 40 to 60 weight percent of a styrene/butadiene/styrene (SBS) block copolymer: The '587 reference caches a coextrusion binder having 65 to 95 parts of (B) which could be an elastomer such as an SBS. The present claims require 40 to 60% (B) of the coextrusion tie be an SBS. Applicant's 40 60 weight % of SBS does not overlap the 65-95 range of the '587 reference. Applicant's required 20-35% PE is well below the 65-95% of the '587 reference, should PE be selected as the (B). Since the '587 reference does not teach or suggest a mixture, these values are not additive.
- 3. a coextrusion tic composition in which 50-90 mol% of the SBS block is styrene. The '587 reference refers generally to elastomers, and specifically lists seven examples. An SBS (styrene/butadiene/styrene) block copolymer being one of the seven. No examples include any elastomer, let alone SBS. The '587 reference makes no mention of specific mole ratios of styrene to butadiene, if an SBS is

10/662.146

even used. Applicants have discovered that the <u>required</u> SBS must contain 50-90 mole percent of styrene, to work as an effective tie layer for a structure laying at least one layer of polystyrene layer. There is no teaching or any suggestion of an optimal ration of styrene in the SBS, nor would one arrive at such a ratio through routine experimentation, as the mole percent of styrene was not recognized as a result-effective variable. Nor was the use of any SBS recognized as a result-effective variable.

Since the cited reference fails to present a *prima facie* case of obviousness over the claims as amended. Applicant believes that the reasons for rejection have been overcome, and the claims herein should be allowable to the Applicant. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,

Thomas F. Roland, Esq. Attorney for the Applicants

Reg. No. 42,110

Arkema, Inc.
Patent Department - 26th Floor
2000 Market Street
Philadelphia, PA 19103-3222
Tel (215) 419-7314
Fax (215) 419-7075

Date: December 22, 2005

BEST AVAILABLE COPY